

Applic. No. 10/791,539
Amdt. dated September 29, 2004
Reply to Office action of June 29, 2004

Remarks/Arguments:

Reconsideration of the application is requested.

Claims 1-14 are now in the application. Claim 1 has been amended. Claims 13 and 14 have been added. Support for claim 13 can be found in claim 1 and on page 8, lines 9-12 of the specification. Support for claim 14 can be found in claim 1 of the instant application. No new matter has been added.

In the first paragraph on page 2 of the above-noted Office action, claims 1-6 and 8-12 have been rejected as being fully anticipated by Kurtz (U.S. Patent No. 5,087,921) under 35 U.S.C. § 102.

Claim 1 was amended to change the preamble and the body of the claim was amended to more clearly emphasize that the shielding plate body shields the electrical component.

However, as will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references.

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Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claims 1 and 14 call for, *inter alia*:

a shielding plate body for shielding the electrical component, the shielding plate body ... and a slot antenna through which electromagnetic waves produced within the shielding plate body are coupled out of the shielding plate body.

The Kurtz reference discloses a "traveling wave array antenna" which Kurtz also refers to as a "waveguide" (claim 1 and column 2, lines 19-49). Claims 1 and 14 of the instant application recite "a housing shaped shielding plate for shielding an electrical component". Accordingly, the invention disclosed by Kurtz is from a completely different technical field.

The Kurtz reference discloses that the antenna slots s_1 to s_n couple out electromagnetic waves which are guided through the waveguide (40) towards the region of the antenna slots s_1 to s_n . The electromagnetic waves are not produced inside the broadwall (41), but instead, are induced by an incident TE_{10} mode excitation signal (column 3, lines 23-27 and column 3, line 66 to column 4, line 7). The origin of this signal is

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not further disclosed but must it must be coupled into the antenna (40) from the outside because the antenna is only filled with the dielectric material, which cannot produce electromagnetic waves on its own.

The reference does not show a shielding plate body for shielding the electrical component... and a slot antenna through which electromagnetic waves produced within the shielding plate body are coupled out of the shielding plate body as recited in claims 1 and 14 of the instant application.

The Kurtz reference discloses a traveling wave array antenna or a waveguide. The Kurtz reference does not disclose a shielding plate body for shielding an electrical component. This is contrary to the invention of the instant application as claimed, in which a shielding plate body shields the electrical component.

Furthermore, the Kurtz reference discloses that the antenna is filled only with dielectric material, dielectric material does not produce electromagnetic waves on its own. Kurtz does not disclose the coupling out of electromagnetic waves that are produced within the waveguide. This is contrary to the invention of the instant application as claimed, in which there is a slot antenna through which electromagnetic waves

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produced within the shielding plate body are coupled out of the shielding plate body.

Since claim 1 is believed to be allowable over Kurtz, dependent claims 2-6 and 8-13 are believed to be allowable over Kurtz as well.

Even though the claims are believed to be allowable, the following remarks pertain to the non-obviousness of the claims.

The Kurtz reference does not disclose anything pertaining to shielding. Even if a person of ordinary skill in the art would consider that the outer layer of the waveguide antenna disclosed by Kurtz might be capable of providing some shielding, there is no motivation to provide an electrical component in the antenna. In particular, it does not make any sense to provide an electrical component inside of an antenna. The antenna disclosed by Kurtz serves to emit electromagnetic waves in an effective manner and an electrical component disposed inside the antenna would be a source of noise.

Moreover, Kurtz explicitly discloses that the inside of the waveguide (40) is filled with a dielectric material (column 6, lines 21-24). Accordingly, the insertion of electrical component in the waveguide does not make any technical sense

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and would destroy the function of the waveguide disclosed by Kurtz.

The following further remarks pertain to new claim 13.

Claim 1 of the instant application recites the limitation "a first region to be disposed inside a metallic structure" and "a second region to be inserted through a cutout of the metal structure". In Fig. 1 of the instant application, the metallic structure 3, the rear region 1a, which is disposed in the metallic structure 3, and the front region 1b, which is inserted through an opening of the metallic structure 3 are clearly shown. Furthermore, claim 13 recites the limitation that "said second region has a connector receptacle to enable coupling of an optical connector to said optoelectronic transceiver".

In contrast to claim 13 of the instant application, Kurtz does not disclose a second region having a connector receptacle. Kurtz discloses that the waveguide antenna is terminated in a load (43) (column 3, lines 65-66). The load (43) is at the end of the waveguide (40), but it does not have a connector receptacle. Furthermore, it does not make any sense to a person of ordinary skill in the art to provide an antenna with a receptacle for an optical connector.

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In the last paragraph on page 3 of the Office action, claims 7 has been rejected as being obvious over Kurtz (U.S. Patent No. 5,087,921) in view of Glabe et al. (U.S. Patent No. 5,748,152) (hereinafter "Glabe") under 35 U.S.C. § 103. The Glabe reference does not make up for the deficiencies of Kurtz. Since claim 1 is believed to be allowable, dependent claim 7 is believed to be allowable as well.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claims 1 or 14. Claims 1 and 14 are, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claim 1, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-14 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel respectfully requests a telephone call so that, if possible, patentable language can be worked out.

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If an extension of time for this paper is required, petition
for extension is herewith made.

Please charge any other fees which might be due with respect
to Sections 1.16 and 1.17 to the Deposit Account of Lerner &
Greenberg P.A., No. 12-1099.

Respectfully submitted,



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